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| APPLICATION NO. | | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|------|-------------|----------------------|---------------------|------------------|
| 10/691,252 | | 10/22/2003 | Michael Buchmann | 890A.0001.U1(US) | 5455 |
| 29683 | 7590 | 03/01/2006 | | EXAM | INER |
| | | SMITH, LLP | VU, BAO Q | | |
| 4 RESEARCH DRIVE SHELTON, CT 06484-6212 | | | | ART UNIT | PAPER NUMBER |
| | | | | 2838 | |
| | | | | | PAPER NUMBER |

DATE MAILED: 03/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

ZY

| | Application No. | Applicant(s) | | | | |
|--|--|----------------------------|--|--|--|--|
| Office Action Summany | 10/691,252 | BUCHMANN, MICHAEL | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Bao Q. Vu | 2838 | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 1)⊠ Responsive to communication(s) filed on <u>06 Ja</u> | nuary 2006. | | | | | |
| | | | | | | |
| 3) Since this application is in condition for allowar | | | | | | |
| closed in accordance with the practice under E | x parte Quayle, 1935 C.D. 11, 45 | 33 O.G. 213. | | | | |
| Disposition of Claims | | | | | | |
| 4) ☐ Claim(s) 1-8 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-8 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement. | | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| , | animer. Note the attached office | 7.00.01 01 101111 7 0 102. | | | | |
| Priority under 35 U.S.C. § 119 | | 4.0 | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| Attachment(s) | | • | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date S Patent and Trademark Office | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other: | | | | | |

Application/Control Number: 10/691,252 Page 2

Art Unit: 2838

DETAILED ACTION

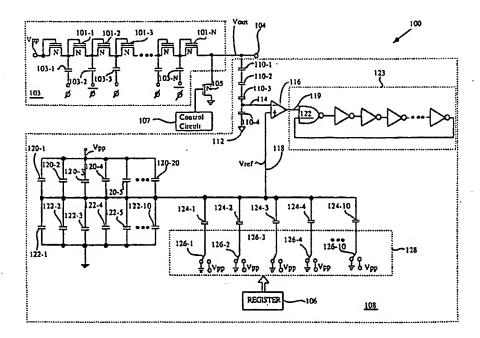
This is in response to the Appeal brief dated 12-30-06. A non-final action follows below.

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kazerounian et al. (USP 5,086,974) in view of Yu (USP 6,304,007). Kazerounian discloses a capacitive multiplier circuit having a diode chain (103) and a charge pump circuitry (128) that connected between the input and output of the multiplier circuit (100). See figure below.

Application/Control Number: 10/691,252

Art Unit: 2838



Yu discloses that it is known in the art to provide a multiplier/ charge pump having capacitors charged in parallel and discharged in series in his prior art. See column 1, lines 18-22, and Yu states that "Switching capacitor is one of the original concepts for the energy conversion. It is available in very limited application such as the energy source for high voltage discharge by connecting an array of capacitors in parallel configuration for charging and in series configuration for discharging." It would have been obvious to one having ordinary skill in the art at the time of the invention was made to provide the a multiplier/charge pump having capacitors charged in parallel and discharged in series of Yu with a capacitive multiplier circuit having a diode chain (103) and a charge pump circuitry (128) that connected between the input and output of the multiplier circuit (100) of Kazerounian, in order to provide a simple way of multiplying,

Art Unit: 2838

pump or step up the voltage of the capacitive arrays that is one of the earliest and original concept of energy conversion for boosting/ multiplying power.

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bao Q. Vu whose telephone number is (571) 272-2088. The examiner can normally be reached on Monday-Thursdays, 8:00AM- 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Karl Easthom can be reached on (571) 272-2084. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Bao Q. Vu

Primary Examiner

Art Unit 2838